

REMARKS

It is noted that, per the request of the Examiner, an Abstract of the Disclosure is provided herewith on a separate sheet.

The claims pending in this application are claims 1-8.

An Information Disclosure Statement ("IDS") is provided with this response, and comments directed to the documents cited in the IDS are included herein.

A Revocation of Power of Attorney and New Power of Attorney is provided herewith.

Claim Rejections Under 35 U.S.C. §103(a):**a. Claims 1, 3, and 5-7:**

Claims 1, 3, and 5-7 stand rejected as unpatentable over U.S. Patent 5,672,418 "Hansen" in five of U.S. Patent 4,878,908 "Martin".

Regarding claim 1, it is stated that Hansen discloses particle binders for use in the manufacture of absorbent pads, bandages (wound dressings), etc. It is further stated that Hansen discloses a method for preparing such products comprising "cross-linking anti-microbial particles, such as carbadox and chloramphenicol to various disclosed fibers via a binder." It is stated that the disclosed binders included non-siloxane bonds. *(to me, a "binder" means something like glue, not chemical bonding, but I have not seen the reference)*

Hansen fails to teach superabsorbent polymer matrix having enhanced surface area. This deficit is said to be cured by the citation of Martin, which teaches superabsorbent polymer matrix, and surface treatments with antiseptics or other wound healing properties.

Through the combination of these teachings, it is stated that it would have been obvious to substitute the web of Hansen for the web of Martin.

As regards claim 3, it is stated that "once modified the moieties (antimicrobial compounds) will bond to the fibers extending above the outer surface of the web in a chain-like fashion."

As regards claims 5-7, it is stated that "the bandage can be used as a sanitary pad or as a tampon."

In response, claim 1 is hereby amended to reflect the polymeric nature of the plurality of antimicrobial compounds bonded to the substrate according to the present invention. In light of this limitation, it is noted that even if everything stated by the Examiner were fully conceded, this would not negatively impact on the patentability of the subject claims as amended. Accordingly, reconsideration and withdrawal of the rejection as to claim 1 as amended is respectfully requested.

Since claims 3 and 5-7 depend from claim 1, if claim 1 as amended is found to overcome the rejections stated by the Examiner, then claims 3 and 5-7 necessarily also overcome those rejections. Accordingly, reconsideration and withdrawal of the rejection as to the claims which depend from claim 1 is respectfully requested.

b. Claims 2 and 4:

Claims 2 and 4 are rejected as being unpatentable over Hansen and Martin as applied to claim 1 above, and further in view of U.S. Patent No. 5,429,628 "Trinh".

The USPTO acknowledges that neither Hansen nor Martin teach that antimicrobial compounds attached to the web/mat as quaternary ammonium compounds. Trinh is cited as disclosing that it is "conventional to add quaternary ammonium compounds to articles for use on the body as a common antibacterial (antimicrobial) agent."

In light of Trinh, it is stated that "one having ordinary skill in the art would have been motivated to select quaternary ammonium compounds as the antimicrobial agent in order to prevent the growth of microbial bacterial."

As noted above, however, in light of the present amendments to claims 1 and 8, it is urged that the conventional addition of quaternary ammonium compounds mentioned in Trinh neither discloses nor suggests the polymeric antimicrobial or the polymeric quaternary amine compounds as called for by the claims as amended. Accordingly, reconsideration and withdrawal of this ground for rejection is respectfully requested.

c. Claim 8:

Claim 8 stands rejected as being unpatentable over U.S. Patent 5,035,892 "Blank" in view of Martin.

It is stated that, in view of Martin, "it would have been obvious to one having ordinary skill in the art to provide the wound dressing of Blank et al. with an enhanced surface area [with] the purpose of creating a more absorbent dressing even when the fibers, which make up the web are small in diameter."

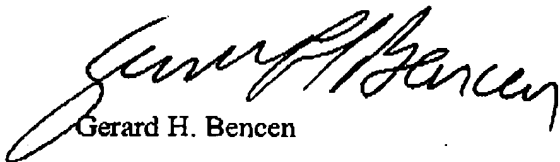
In response, it is noted that Blank teaches bonding via siloxane bonds, which is excluded from the current claims. Thus, at a minimum, at least Hansen would need to be combined with this citation for its teaching of non-siloxane bonds). However, even a combination of Blank, Martin, and Hansen would not render claim 8 as currently amended to be unpatentable. None of these references teach polymeric antimicrobials bonded to a substrate (Blank teaches monomeric siloxane-based quaternary compounds bonded to superabsorbent polymers). The siloxane-based linkages are highly susceptible to hydrolysis, and the monomeric antimicrobials lack the benefit of a large number of antimicrobials per unit of surface area afforded by the polymeric nature of the present antimicrobial surface treatment method. Use of silanes, per Blank, is also observed to

reduce the absorbent capacity of a substrate, due to the hydrophobic nature of the bond. This is a pit-fall that the present invention avoids.

Information Disclosure:

The Examiner's Interview Summary from the in-person interview held between the undersigned attorney and the Examiner on 9 June 2003 notes that the undersigned provided the Examiner with a copy of US Patent 4,076,663 and a copy of a Russian Publication which was provided with an English translation. Also noted was the undersigned's undertaking to provide "the cite from the book Cyclochemistry in which the [Russian] publication was discovered." Provided herewith are the title, copyright page, and pages 246 and 272 which make reference to the Russian article. These documents do not appear to have been made of record other than in the Examiner's Interview Summary. Provided herewith is an Information Disclosure Statement which makes these documents of record. The Examiner is respectfully requested to return an acknowledged copy of the IDS to the undersigned indicating that these documents have been made of record and have been substantively considered in the prosecution of the present application.

Respectfully submitted,



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